

VT Trans		STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		BORING LOG		Boring No.: B-2						
		Hyde Park Bridge #42 STP CULV (26)		Page No.: 1 of 2		Pin No.: DTH						
Boring Crew: J. Wirmett (GeoDesign), J. Leonhardt (TransTech)		Casing Sampler		Groundwater Observations								
Date Started: 8/14/12 Date Finished: 8/15/12		Type: FJ SS		Date		Notes						
VTSPG NAD83: N 762609.00 ft E 1612324.00 ft		Hammer Wt: 140 lb. 140 lb.		08/14/12		16.5 Wet soil.						
Station: 4+28 Offset: 15' L		Hammer Fall: 30 in. 30 in.		08/15/12		24.5 In casing overnight.						
Ground Elevation: 634.0 ft		Hammer/Rod Type: Auto/NWJ										
		Rig: CME 75 TRACK CE = 1.43										
Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (R00 %)	Drill Rate (minutes/ft)	Blows/ft (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
0.0	X X X	Asphalt, 0.0 ft - 0.2 ft										
0.2	X X X	Visual Description (Burmister), S1 (0.5'-2'): Medium dense, brown fine to coarse SAND and fine to coarse GRAVEL, trace (+) Silt, dry, (AASHTO M145 Classification: A-1-a)			18-11-14 (25)	2.8	42.1	37.2	8.2			
1.08	X X X	Rec. = 1.08 ft			11-12-15-16 (27)	8.0	5.8	60.9	32.4			
1.58	X X X	Visual Description (Burmister), S2 (2'-4'): Medium dense, light brown fine SAND, some SILT, trace fine Gravel, slightly moist, Rec. = 1.58 ft, (AASHTO M145 Classification: A-2-4)			2-2-2-3 (4)	6.8	1.3	72.4	26.3			
1.58	X X X	Rec. = 1.58 ft			1-1-2-3 (3)	5.2	0.4	74.0	25.6	31	3	
1.5	X X X	Visual Description (Burmister), S3 (5'-7'): Very loose, light brown fine to medium SAND, some Silt, slightly moist, Rec. = 1.5 ft, (AASHTO M145 Classification: A-2-4)			1-2-2-5 (4)	29.1	4.5	95.5	30	5		
1.25	X X X	Rec. = 1.25 ft			5-4-4-4 (8)	8.4						
1.25	X X X	Visual Description (Burmister), S4 (7'-9'): Very loose, S4A - Top 7': similar to S3. (AASHTO M145 Classification: A-2-4)			1-4-3-6 (7)	28.8	12.5	87.5				
1.25	X X X	S4B - Bottom 8': Soft, gray Clayey SILT, trace Clay & Silt partings, moist, (AASHTO M145 Classification: A-4), Rec. = 1.25 ft			3-6-4-5 (10)	28.7	6.6	93.4	30	11		
1.5	X X X	Rec. = 1.5 ft			9-16-14-50 (30)	21.9	18.6	13.0	87.0			
1.5	X X X	Visual Description (Burmister), S5 (10'-12'): Very loose, gray SILT, little (-) Clayey Silt, very moist, Rec. = 1.5 ft, (AASHTO M145 Classification: A-4)			19-12-14-16 (26)	11.3		32.6	37.8			
1.75	X X X	Rec. = 1.75 ft			24-50/3"	10.5	19.1	33.0	36.7			
1.58	X X X	Visual Description (Burmister), S7 (15'-17'): Loose, gray-brown to gray SILT, little Clayey Silt, trace fine Sand, very moist to wet at tip, Rec. = 1.58 ft, (AASHTO M145 Classification: A-4)			12-10-5-50/4 (15)	10.4	31.0	42.4	23.3			
1.17	X X X	Rec. = 1.17 ft					43.8	26.3	18.9			
1.17	X X X	Visual Description (Burmister), S8 (17'-19'): Medium dense gray with occasional brown mottling Clayey Silt, trace (+) fine Sand, trace Silty Clay seams up to 1/2" thick, wet, Rec. = 1.17 ft, (AASHTO M145 Classification: A-6)										
1.33	X X X	Rec. = 1.33 ft										
1.33	X X X	Visual Description (Burmister), S9 (20'-22'): Dense, S9A - Top 6": Grayish brown finely parted SILT, trace Clayey Silt, trace fine Sand, wet.										
1.33	X X X	S9B - Bottom 10": Light brown SILT and fine to medium SAND, little fine to coarse Gravel, wet. Coarse Gravel stuck in tip, Rec. = 1.33 ft, (AASHTO M145 Classification: A-4)										
1.25	X X X	Rec. = 1.25 ft										
1.25	X X X	Visual Description (Burmister), S10 (22'-24'): Medium dense, grayish brown SILT, some fine to medium Sand, little fine Gravel, wet, Rec. = 1.25 ft										
0.5	X X X	Rec. = 0.5 ft										
0.5	X X X	Visual Description (Burmister), S11 (25'-25.75'): Refusal, gray SILT and fine to medium SAND, little fine Gravel, wet, Rec. = 0.5 ft, (AASHTO M145 Classification: A-4)										
0.5	X X X	Rec. = 0.5 ft										
0.5	X X X	Visual Description (Burmister), S12 (30'-31.8') Medium dense, S12A - Top 11": Gray fine to medium SAND, some Silt, some fine Gravel, wet, Rec. = 1.25 ft, (AASHTO M145 Classification: A-2-4)										
1.25	X X X	Rec. = 1.25 ft										
1.25	X X X	Visual Description (Burmister), S12B - Bottom 4": Gray										

BOTTOM OF ABUT. #2
ELEV. 622.00

APPROX. PILE TIP @ ABUT #2
ELEV. 602.00

BORING LOG (EDITED) 888-042 HYDE PARK CULV VERMONT A011.B01 10/02/12

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

VT Trans		STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		BORING LOG		Boring No.: B-2						
		Hyde Park Bridge #42 STP CULV (26)		Page No.: 2 of 2		Pin No.: DTH						
Boring Crew: J. Wirmett (GeoDesign), J. Leonhardt (TransTech)		Casing Sampler		Groundwater Observations								
Date Started: 8/14/12 Date Finished: 8/15/12		Type: FJ SS		Date		Notes						
VTSPG NAD83: N 762609.00 ft E 1612324.00 ft		Hammer Wt: 140 lb. 140 lb.		08/14/12		16.5 Wet soil.						
Station: 4+28 Offset: 15' L		Hammer Fall: 30 in. 30 in.		08/15/12		24.5 In casing overnight.						
Ground Elevation: 634.0 ft		Hammer/Rod Type: Auto/NWJ										
		Rig: CME 75 TRACK CE = 1.43										
Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (R00 %)	Drill Rate (minutes/ft)	Blows/ft (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
32.0		DECOMPOSED ROCK, foliated, (AASHTO M145 Classification: A-1-b)										
32.0		32.0 ft - 34.8 ft, (C1) Fair quality, highly to moderately weathered, moderately hard to hard, fractured (top 10") to close jointed, gray with white intrusions PHYLITE. Moderate reaction to dilute HCl in white intrusions, jointing near vertical with occasional horizontal beds.										
34.8		34.8 ft - 38.0 ft, (C2) Fair quality, slightly weathered with moderately weathered jointing, moderately hard to hard, close to moderately jointed, gray with white and occasional green PHYLITE. With occasional white Quartzite intrusions. Moderate reaction to dilute HCl in white non-quartzite intrusions. Jointing at near vertical with occasional moderately weathered horizontal seams.										
38.0		38.0 ft - 40.3 ft, (C3) Good quality, slightly to moderately weathered with moderately weathered joints, moderately hard to hard, closely jointed, gray with white and occasional green PHYLITE. With occasional white Quartzite intrusions. Moderate reaction to dilute HCl in occasional white non-quartzite intrusions. Jointing at near vertical with occasional near horizontal seams (possible driller breaks).										
40.3		40.3 ft - 42.0 ft, (C4) Poor quality, slightly to moderately weathered, moderately hard to hard, closely jointed, gray with green and white PHYLITE. Occasional moderate reaction to dilute HCl in white intrusions. Jointing near vertical.										
42.0		Hole stopped @ 42.0 ft										
		Remarks: 1) Ground surface elevation, coordinates, and stationing are estimated from an electronic site plan provided by TY Lin and taped measurements in the field. 2) Augered to 6" deep prior to sampling S1. 3) Auger grinding from 2' to 2.5' an inferred cobble or boulder. 4) Used 3.25" I.D. hollow stem augers (HSA) to 15' deep. Switch from HSA's to 4" O.D. flush joint casing after sampling S7 at 15' deep. 5) Driller attempted to advance boring open hole below 20' deep through dense silt. Noted approximately 12" of heave at 25' deep. Driller drove casing to 25' deep and cleared with the roller bit prior to taking sample S11. 6) Clean hole with roller bit and telescope 3" casing to 32' deep prior to coring. 7) Core run C1 was stopped after 33" of penetration at 34.8' deep due to core block. 8) Ended core run C2 at 38' due to core block. Recovered lost portion of C1 when coring C2 (39" penetration with 42" recovery). 9) Ended core run C3 at 40.3' deep due to core block. 10) SPT N-values were performed according to ASTM D1586. 11) Lab testing gradations reported are per AASHTO M145.										

BORING LOG (EDITED) 888-042 HYDE PARK CULV VERMONT A011.B01 10/02/12

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

PROJECT NAME: HYDE PARK
PROJECT NUMBER: STP CULV(26)

TYLIN INTERNATIONAL

FILE NAME: zlib292bdrborlog2.dgn
PROJECT LEADER: R. HEBERT
DESIGNED BY: J. OLUND
BORING LOGS 2

PLOT DATE: 11/6/2013
DRAWN BY: S. MORGAN
CHECKED BY: J. OLUND
SHEET 26 OF 60